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Behind the Doors of Moffat & Co.

By Dan Owens 2005

Moffat & Co. which consisted of John Little Moffat, Joseph R. Curtis, Philo H. Perry and Samuel H. Ward, operated an assaying and coining office in San Francisco beginning in the summer of 1849.

In January of 1851, they began a business relationship with the United States Government. Together with United States assayer Augustus Humbert, they struck large quantities of gold coins in denominations of \$10, \$20 and \$50. They also melted, poured, assayed and stamped ingots with their hallmark, serial number, value, weight and fineness.

Early on in their history Moffat & Co. also produced small \$16 gold bars which circulated as money.

A Contemporary Description of a \$49.33 Moffat & Co. Gold Bar. On September 19, 1849, the Brooklyn Daily Eagle editors gave a detailed description of a small Moffat & Co. gold bar which was poured in the summer of 1849:

Yesterday we saw a piece of gold assayed in California. It was nearly two inches in length, half an inch in width and a quarter of an inch in thickness. Its weight, was 52 dwts. 8 grs., the gold 21 1/2 carats fine and the value \$48.33-all of which were stamped on the bar. It was sent out by Mr. Moffat, of this city, the father of Dr. Moffat of Clinton street, who is an assayer by profession and has gone to California with the view of putting the gold of that country into shape and form and to ascertain and stamp it with its exact value.-We understand that at the last advices, he had already assayed gold to the amount of over \$100,000. All of the gold which he assays bears the name of the firm "Moffat & Co.," the weight of the piece, its fineness and its value, on one side, and on the other the words "California gold." We understand that the character of Mr. Moffat is so well established as an assayer that gold assayed by him will be received in New York for its stamped value and hence it has an important advantage over all the other forms into which into which the precious metals are thrown in that incipient country.

Robert Chandler notes, if the editors of the Eagle are correct in their description of the preceding bar, it was 896 Fine and was valued at \$18.52 an ounce. At 58 penny-weights, 8 grains or 2.6167 troy

ounces, he calculates its value as being around \$48.46. Numismatist Mike Locke points out that in Montroville Dickeson's the American Numismatic manual's second edition published in 1860 the text reads: "The ingots of Moffat & Co. (are) of various sizes, from about \$9.00 to \$260. It may be stated, in general, that some were found to be rated too high, and others too low..." Also note that the lettering "California gold" does not appear on the back side of any known Moffat & Co. bars. Perhaps as Locke as pointed out to the author, this bar was some sort of presentation piece from Moffat to his son, and that would explain the extra lettering.

Regardless, the surviving Moffat & Co. gold bars have a well documented history. According to Locke, Dickeson's book contains block cuts of a Moffat & Co. \$16 gold bar and the unique \$9.43 gold bar.

In Eckfeldt & Dubois New Varieties of Gold and Silver Coins, Counterfeit Coins and Bullion: with Mint Varieties published in 1850, there is a drawing of a Moffat & Co. \$16 bar. Locke also notes, Edgar H. Adams' Private Gold Coinage of California 1849-1855, Its History and Its Issues published in 1913, contains photographs of a Moffat & Co. \$16 bar and the unique \$9.43 bar. The pedigree of the unique Moffat & Co. \$14.25 gold bar can be traced back to coin dealer B. Max Mehl who sold the piece in 1932 and it eventually became part of the famous Josiah Lilly collection. Perhaps the contemporary report was incorrect regarding the lettering of "California gold" on the back of Moffat's bars or Moffat chose to remove the irrelevant lettering from the reverse of his bars.

The Mint In Operation

Moffat & Co. operations were housed in a state of the art building with the amenities of a United States Provisional Mint. A reporter

for the Picayune offered a rare glimpse into the inner workings of Moffat & Co. and the manufacturing process involved in striking the symbol of California Gold Rush numismatics, the \$50 gold slug. Picayune June 26, 1851:

Moffat's Coin.

We were much pleased, and somewhat surprised, a day or two ago, while rambling about in the splendid building recently erected by Messrs. Moffat & Co., to see the completeness of their establishment in every respect, and the quiet quickness with which they conduct their manufacture of those octagonal pieces of yellow metal, for which we all scramble with so much avidity.

The building itself is really worth a thorough examination. It is as near fire-proof as any building can be in which wood is at all introduced; the joist are set in the wall in such a manner as to secure from ignition, should the building be subjected to the most intense heat. The floors are laid in cement, and to make assurance doubly sure, a large cistern has been placed on the roof, capable of containing a thousand gallons of water. By a very simple and beautiful arrangement, their cistern is kept filled by a pump, which can at any moment be set in action by the power employed in the building for manufacturing processes. In fact, Moffat's building is not only secured against fire itself, but will, we are convinced, prove a protection to the whole neighborhood.

The refining process is the first one to which the gold is subjected. By it a uniform standard is arrived at, and this department the greatest care is necessary. The perfection of their operation in this respect has been tested satisfactorily in the various assays of their coin which have been made both in this city and the Atlantic cities. After the mass has been brought to a uniform fineness it is run into ingots of one hundred ounces each. These are about ten inches in length by one and a half in breadth and half an inch in thickness. When taken from the mould they exhibit none of the brilliancy for which the metal is memorable, but are of a dull yellow color, spotted with prismatic shades of red and blue. The ingots are then subject to the rolling process, the rollers-as in all the rest of the machinery-being propelled by a beautiful, easy working steam engine.

When reduced by this process to the proper thickness for the \$50 issue, the ingots have attained a length of about two feet, and are as bright as any one could desire.

They are then again weighed, and put under the punch-an immense hammer moved by steam and weighing several tons-which cuts them to the requisite size, and gives them the octagonal shape. By a very simple arrangement, as soon as they are thrown out, and the machine is so arranged that the power can be thrown off, or on, by the touch of the finger.

As soon as taken from the punch, which

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makes them \$50 pieces, in shape, at least, they are again weighed separately; those which run over the proper weight being filed down, and those condemned being sent back to the furnace to be cast into ingots a second time. The pieces are then subjected to the last process, being placed under the die. This machine is not moved by steam. It is a screw such as is often seen in notorial presses, one side of the die being attached to the shaft of the screw, and the other being set in the bottom of a cavity of corresponding shape. An immense cross-piece of iron, of about six feet in length, with balls of about thirty pounds weight affixed to the extremities, affords sufficient power to enable one man to strike the die down with tremendous power, and one swing of the lever completes the work. The piece comes out sharp and perfect, and having again been weighed, to prevent mistakes, is sent upstairs to the office, to go on its mission of good or evil throughout the world. For neatness, simplicity, and security, we have never seen any manufacturing establishment superior to that of Messrs. Moffat... We would advise any of our readers who have an hour's spare time, to visit the establishment, and we will guarantee their complete enjoyment. 1

The San Francisco Fire of May 1851

The bustling streets of San Francisco proved to be a dangerous environment in which to conduct an assaying and coining business. Gold Rush San Francisco was the scene of numerous fires with so many wooden buildings being built so close together, the potential for destruction was tremendous. The United States Assaying Office of Moffat & Co.'s new fire proof structure was put to the ultimate test in May of 1851 when a terrible fire destroyed several blocks of San Francisco.

Alta California May 4, 1851:

Terrible Conflagration!
San Francisco Again in Ruins!
Several Squares Destroyed!
Loss About \$5,000,000.
Several Lives Lost.

...Here and there a brick building stands like a tomb among a nation of graves, yet even they in most cases have nothing but their walls standing. Scarce a fire-proof building in the whole burnt district has stood the test. Such as have are the California Exchange, El Dorado, Verandah, on Portsmouth Square, and the buildings of Capt. Howard, in which was the U.S. Assaying Office of Moffat & Co., on Montgomery Street. This building was saved only at the risk of their lives by Messrs. Moffat, Perry & Ward, of that firm, who remained within the building throughout the conflagration and extinguished the fire repeatedly.

Moffat's Own Account of The Fire

Brooklyn Daily Eagle, June 23, 1851:

The Great Fire.

House of Moffat & Co....

San Francisco May 4th, 1851.

How little we know what a day may bring forth ! Twenty four hours ago, it had not entered into my imagination to conceive of the tremendous desolation that now surrounds us on every side. Just about eleven o'clock last night, we first heard the alarm of fire...-The wind blew a gale, and whistled like bleak November in the Atlantic States...The wind seemed to increase and drove the flames south, beyond the fire proof buildings, so that it traveled rapidly down Commercial street, both sides of which it swept clean, to Montgomery street. Our office is midway between Commercial and Clay streets. The furnace and coining shop were on Commercial street, and though built of strong brick walls, were hemmed in by two and three story wooden buildings, which were soon in flames, and communicated through the gable to the wooden rafters of our premises. They were burnt, and the roof falling in, consumed all the floors and partitions, and let our mills and some of the machinery into the cellar. We had taken the precaution to remove the assay scales, dies, and choice small tools, with all the gold and valuables into the vault for safety. There was in our rear, adjoining the coining shop, a three story wooden building about twelve feet from our back windows, and on the opposite side of Montgomery street, the Revere House, a large wooden house fifty feet square, and three stories high, and a large wooden house on each side of it. I made up my mind that when these got fairly going, we might look for warm weather. The rear house was first reached by the fire traveling north from Commercial street, in the rear, to Clay street, thence east along Clay until it laid hold of the three-story wooden house in our rear. This compelled us to throw water on the wood work of the windows, as the fire blazed up, notwithstanding, the iron shutters were closed. At this time Joseph begged us, for God's sake, to save our lives, and let the property go. He went to the Union Hotel, which was on fire, [and saved lives]... While this was going on Perry and I were busy fighting the fire on our own floor, and making frequent visits to the upper part of the house, and also on the roof. The door on the roof became too hot to hold, and I feared the house would take fire there; but it was well attended to by Mr. Howard the owner. While the rear house was burning it was too hot to go out on the roof, and by the time it fell in, the Revere House, and those adjoining it, were in one massive sheet of flame. We became apprehensive that the fire might find its way into the cellar, which was stored with liquors. To learn the state of things below Mr. Perry and I went down and found Mr. Ward at the front, iron door, trying to hold it shut, to keep out the intense heat and flame that came from the opposite side of Montgomery street. At this time, we three, were the only persons in the house. It had been impossible for a long time to get out by the rear or from the roof, and seeing so large a fire in front Mr. Perry became alarmed and insisted on making the attempt to escape through the flames in front. The heat had become so great that the iron door was so sprung that when not held it left an opening of a foot. Through this Mr. Perry thrust his head to go but Ward seized him by the coat and held him back. I told him we were in no danger at present where we were, and advised that we should continue our exertions to save the house. If that was saved we would be safe:

He concluded that we were right and I saw no more appearance of alarm.-He took charge of the cellar and I of the door.-From time to time I threw water on and then laid flat down on some clothes that had been thrown on the floor in the entry, so that I could breath more freely: then up to throw water; and so on for an hour, occasionally going upstairs to see that all was right. Mr. Ward was throughout the most efficient man among us; but for him, I doubt if we could have saved the house, and he could not have saved it alone without our aid. While I was lying on the floor to breathe fresh air, Mr. Perry came with a pail of water, and stumbled over my feet, not seeing me, and spilled the water on my shoulder and breast; we all got wet more or less. After the fire that surrounded us had pretty much burnt down the houses near, and the street became so clear that a person, without danger could make his way out, two firemen came to our door to know if there were any persons alive in the house. They had seen Ward and me from the street, on the roof, and supposed we were driven there in extremity, to seek the means of escape. They procured four long ladders and proceeded to tie them together, for the purpose of reaching us. They said it was generally believed and reported about the city that Mr. Moffat had perished in the house, seeing it so surrounded by fire, that nobody could approach to give relief, and that they had come at the earliest moment they could; but did not expect to find us alive; and insisted that we should go with them. So I went up into the office to see that all as safe and returned in a few minutes to accompany them. It was pretty hot; but we got through without injury and received a joyful welcome. In about half an hour I went back and found everything safe... The report had traveled pretty well over the city in a short time, and gained credit with most persons, that old Mr. Moffat had perished in trying to save the house, and I received many and apparently sincere congratulations on y safety and success...

Our house adjoins Wells'; and seeing us on the roof, while the fire cut off escape, they concluded we were lost, and the report originated from that and got in the papers. When we were in great danger and doubtful whether we would escape, I went to the bureau to see what things would be worth saving. The daguerreotypes were the first I thought of; but there were five large ones, which made too big a bulk to be encumbered with. I put the twins in my pocket, concluding I would have those little angels to comfort me if I escaped...I am inclined to think that we will be twenty thousand dollars out of pocket by the time we get to work again. Both pairs of rolling mills, our cutting and furnace mill, the stamping mill and draw board, with the steam engine all passed through the fire, and will have to undergo repairs to be made anew...2

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Death of a Partner

In 1852, John Little Moffat left the firm and the new partnership consisted of Curtis, Perry & Ward under the United States Assay Office of Gold. The remaining partners suffered a personal tragedy in 1853 with the death of Samuel Ward.

Mr. Ward left his post at the assay office to travel to the Sandwich (Hawaiian) Islands. He was battling consumption and his friends had hoped that a trip to the Islands would restore his health. However, this was not to be, he lost his fight for life onboard the brig Zoe just before her landfall. Mr. Ward passed away on March 20th or 21st.

In the Placer Times and Transcript of April 21, the editors said they read about Ward's passing in the Polynesian of March 20th. A friend paid a heartfelt tribute to him in the Alta California in April 30, 1853:

The Late Samuel H. Ward.

Mr. Ward whose decease has already been announced, was a native of East Hartford, Ct., was a graduate of Wesleyan University, Middletown, Ct., of the class of 1839; was for some years connected with the press of New York city, being publisher of the Emporium, and since his arrival in California in 1849, has been a member, first of the firm of Moffat & Co., and subsequently of that of Curtis, Perry, & Ward, Assayers of this city. He died on board the brig Zoe, the day before her arrival at Honolulu-the 22nd ult.-and was buried on shore. He died of consumption, a predisposition to pulmonary complaint, having undoubtedly been ripened into the dread disease by too long and constant attention to his duties in, and consequent exposure to the noxious vapors of the assaying room.

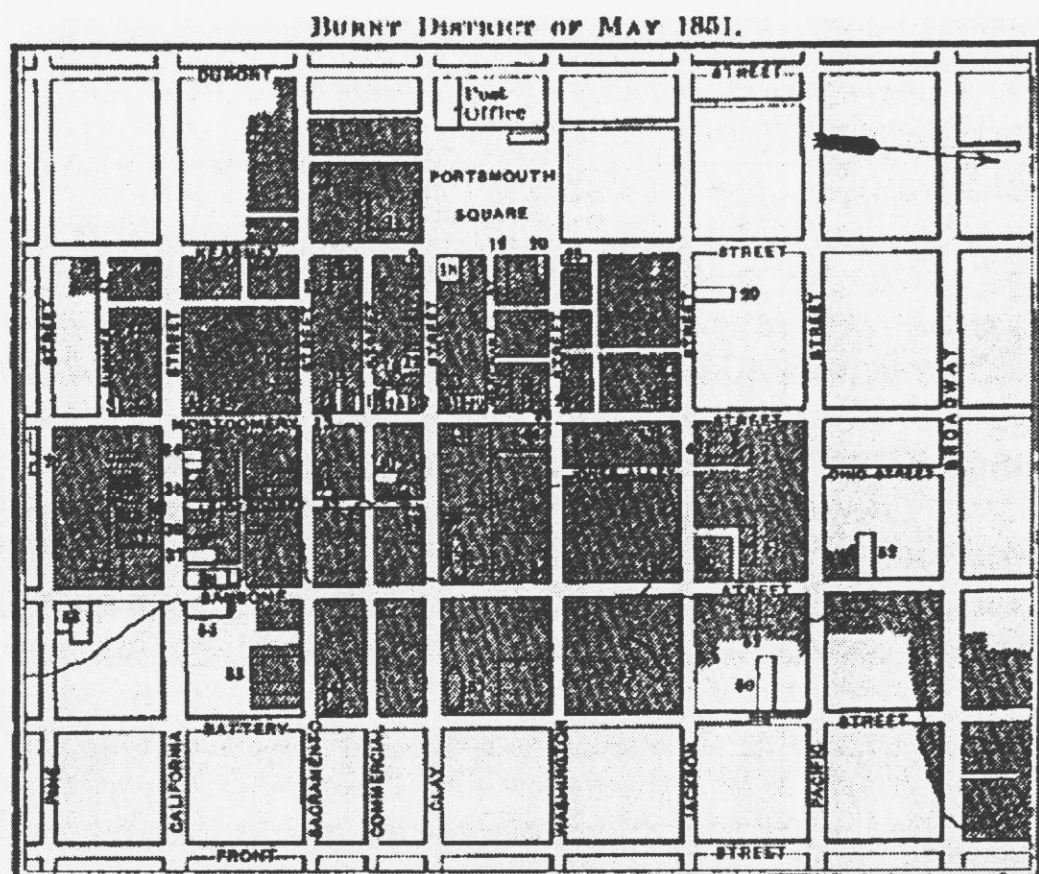
The character of Mr. Ward was of that kind which requires near observance and familiar intimacy, to be fully understood...His affections like his character, were founded in principle, and never fluctuated with the varying influences about him. By the public he was known as scrupulously honest in matters of business, affable and kind in demeanor, never making an effort for admiration, yet commanding it by the unaffected outflowings of a generous and sincere nature, truly self respecting, and consequently respected by all...A fine scholar, a faithful friend, an admirable companion, a man in all the relations of life marked by the characteristics which make manhood most worthy of admiration-he has left in the hearts of those who knew him best, a living epitaph of kind memories for his many estimable qualities, and of sad regrets for his untimely fate. And long will the moaning wave and wind that come from that island far away, whisper to our hearts the familiar name and remembered virtues of the poor blighted friend who withers therein his lonely grave. F.S.

The United States Assay Office was closed on April 21, 1853, in a show of respect for the memory of Mr. Samuel H. Ward. On December 14, 1853, the Office was shut down to begin its transformation into the San Francisco Branch Mint which opened in April of 1854.

1. Kenneth M. Johnson. ed., San Francisco as it is; gleanings from the Picayune, Georgetown, CA. The Talisman Press, 1964.)

2. The same issue of the Brooklyn Eagle newspaper contained a comment from the editors that Mr. Moffat was 63 years of age and may have overstated his physical prowess during the fire.

Map of the "Burnt District" in the fire of May, 1851



The jagged line below Montgomery st indicates the extent of filled ground beyond the natural shore line. The larger portions even of the central blocks were covered by wooden buildings. The following list, referred to the plan by numbers, embraces nearly all the notable exceptions, occupied by a large proportion of the leading business firms. The fire consumed also most of the streets beyond the water line, which, being really wharves on piling, burned readily.

1. City Hotel, brick building
2. Fitzgerald, Bausch, Browster, brick
3. Capt. Folsom, iron building, adjoining brick b. burned.
4. Custom-house, brick b.
5. Rising & Casill, brick and iron.
6. Cramer, Rambach, & Co., brick.
7. R. Wells & Co. banker, brick
8. Treadwell & Co. brick.
9. J. Hahn & Co. brick.
10. Standard office, brick
11. Johnson & Calfield, wooden b., adjoining brick b. burned.
12. Moffat's Laboratory, brick.
13. Quartermaster's office, brick
14. Gildermeister, De Fremery, & Co., brick
15. J. S. Assayer's office, Dodge's Express, F. Argenti, banker, brick
16. E. Davidson, banker, brick.
17. Wells & Co. bankers, brick.
18. California Exchange, brick.
19. Union Hotel, brick
20. El Dorado, gambling-place, brick.
21. Tallant & Wilde bankers, Page, Bacon, & Co. bankers, brick.
22. Gregory's Express, brick.
23. Delmonico's, brick, and three adjoining brick b. burned
24. Burgoyne & Co. bankers, brick.
25. The Verandah, resort, brick.
26. El Picayune, journal, brick.
27. 28. Brick buildings.
29. Markwald, Caspari, & Co., wooden b.
30. Hornhardt, Jacoby, & Co., Hoffman & Iron, wooden b.
31. Ploche Hayerquo, brick and iron, several iron b. in rear.
32. Bonded warehouse, iron.
33. Starkey, Janlon, & Co., b'k and iron.
34. I. Naylor, Cooke Bros, brick.
35. Helman & Bro., brick.
36. Starr & Minturn, and others, 2 iron and 2 brick b.
37. Hastler, Baines, & Co., brick.
38. Jones' Hotel, wooden.
39. F. M. Steam Navig. Co., brick.
40. W. Gibb, brick.
41. Godeffroy, Sillem, & Co., brick.
42. Bonded warehouse, iron.
43. Herald office, brick.
44. Courier office, brick.
45. Nautic, store ship.
46. Baldwin's Bank, iron.
47. J. B. Bidleman, brick.
48. Cronise & Bertelot, iron.
49. Larco & Co., brick, iron adjoining.
50. Huerlin & Belcher, brick.
51. Balance office, brick.
52. Dewitt & Harrison, brick.
53. Macdonay & Co., brick, iron, and wood.
54. Appraiser's office, iron.
55. Dunker and others, iron.
56. 'Apollo' store ship.
57. 'Gen. Harrison' store ship.
58. 'Georgian' store ship
59. Cross & Co. iron.
60. Bonded stores, iron.

Besides the above, a score and more of brick and iron buildings were destroyed.

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